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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/786,883	06/07/2001	Ryoichi Nemori	Q63526	6523

7590

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Sughrue Mion Zinn Macpeak & Seas  
2100 Pennsylvania Avenue NW Suite 800  
Washington, DC 20037-3213

EXAMINER

CHAUDHRY, MAHREEN F

ART UNIT

PAPER NUMBER

1623

DATE MAILED: 02/06/2002

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/786,883

**Applicant(s)**

NEMORI ET AL.

**Examiner**

Mahreen Chaudhry

**Art Unit**

1623

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-12 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-12 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on \_\_\_\_ is: a) ☐ approved b) ☐ disapproved by the Examiner.  
If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

### Priority under 35 U.S.C. §§ 119 and 120

- 13) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All b) ☐ Some \* c) ☐ None of:  
1. ☐ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.  
3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).  
a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)                      4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_.
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)                      5) ☐ Notice of Informal Patent Application (PTO-152)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_.
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Claim Objections***

1. Claims 4, 6-8 and 12 are objected to under 37 CFR 1.75(c) as being in improper form because a multiple dependent claim cannot depend from any other multiply dependent claim. See MPEP § 608.01(n). Accordingly, the claims 4, 6-8 and 12 have not been further treated on the merits.

### ***Claim Rejections - 35 USC § 102***

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claim 9 is rejected under 35 U.S.C. 102(b) as being anticipated by U.S. Patent 4,956,269 issued to Ikeda et al. Ikeda et al. disclose a composition comprising a gelatin layer containing a microparticle silver iodide emulsion (Column 59, Lines 19-23). Although Ikeda et al. does not teach that the composition may be used for the measurement of thiol group containing compounds, the intended use of a composition does not patentably distinguish a known composition.

***Claim Rejections - 35 USC § 103***

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-5 and 9-11 are rejected under 35 U.S.C. 103(a) as being unpatentable over the combination of GB 2,200,989 published Holger et al. in view of WO 97/05482 published by Kerschensteiner. Holger et al. disclose a method and reagent for the detection of thiol compounds. Holger et al. disclose that thiol compounds are detected using a reagent containing  $\text{Fe}^{3+}$  ions which are reduced by thiol compounds to  $\text{Fe}^{2+}$  ions. These reduced  $\text{Fe}^{2+}$  ions may be detected by the formation of a detectable, colored complex (p 2). Holger et al. teach that the test reagent may be utilized for the detection of such thiols as liponic acid amide, thiocholine, glutathione and coenzyme A and further for the detection of such compounds in blood serum, plasma or urine (p 3; 5). Holger et al. additionally teach that the test reagent may be incorporated into a device by introducing the test reagent on to carrier matrices such as cellulose, gelatin, polyurethane and acrylamide (p 6). Holger et al. disclose that the test reagent may be introduced onto the carrier by spraying (p 5).

Holger et al. does not expressly disclose that the iron ions are provided in the form of microparticles. However, the use microparticles of metal compounds in the detection of thiol compounds is known. Kerschensteiner discloses a method for detecting thiol and mercaptan compounds in a sample by the use of a colloidal metal sol suspension (abstract). Kerschensteiner discloses that the presence of thiol compounds is determined by the color change of the colloidal

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solution (abstract). Kerschensteiner teaches that colloidal metal sols have particle sizes within the range from 10 to 120 nm (p 8, lines 17-18). Kerschensteiner additionally teaches the inclusion of salts including calcium chloride and aluminum chloride and polyelectrolytes such as gelatin and dextran (p 2, lines 7-8; p 9, lines 7-11). It would therefore have been obvious to one having ordinary skill in the art at the time of the invention to have detected thiol compounds using the test reagent device taught by Holger et al. and to have utilized colloidal metal as the detecting agent as taught by Kerschensteiner since both Holger et al. Kerchensteiner are directed to the detection of thiol compounds by interaction with metal compounds.

6. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

U.S. Patent 4,021,198 issued to Fujita et al. discloses a method for detecting cysteine which comprises the addition of a reducing agent and metallic compound.

SU 1769124A1 published by Teroganesyan et al. discloses a method for the determination of mercaptan content in petroleum fuels by passage through a layer of zeolite and particulate silver ions.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahreen Chaudhry whose telephone number is (703) 605-1200. The examiner can normally be reached on Monday – Friday (8:30-5:00).

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Gary Geist, can be reached on (703) 308-1701 . The official fax phone number for the organization where this application is proceeding or assigned is (703) 308-4556 or 308-4242.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-1235.

mc

February 4, 2002



RALPH GITOMER  
PRIMARY EXAMINER  
GROUP 1200